

GHS Classification

ID1223

pirimiphos-ethyl

CAS 23505-41-1

Date Classified: Jan. 23, 2007 (Environmental Hazards: Mar. 31, 2006)

Physical Hazards

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Category 4	-	Warning	Combustible liquid	The firing point was described to be >60 degC in PM (13th, 2003), and although upper limit was unknown, it was classified as Category 4.
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Not classified	-	-	-	The flash points is >60 degC (PM, 13th, 2003), and even if it contacts the normal temperature air, it does not ignite spontaneously.
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid substances are not available
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Stable to water (the water solubility is obtained)
13 Oxidizing liquids	Classification not possible	-	-	-	No data available
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Although HSDB (2003) has the description "steel and the steel which has not carried out tinning are corroded," since data is insufficient, it cannot be classified.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the value of LD50 = 140mg/kg calculated by the rat oral LD50 values : 140 (RTECS (2003)), 140 (HSDB (2003)) and 19 mg/kg (HSDB (2003)), the substance was classified as Category 3.
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	It was set as Category 3 from rat dermal LD50 = 1g/kg (RTECS (2003)).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Not classified	-	-	-	From description (HSDB (2003)) that there is no skin irritation to a rabbit, it carried out the outside of Category.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	Classification not possible; Skin sensitization: Classification not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there is positive knowledge extremely in a high dose in an Ames test (RTECS (2003)), there is no other data. So it cannot be classified because of insufficient data
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	No data available
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data. In addition, the influence (cholinesterase inhibition) on a central nervous system is suggested as an organophosphorus insecticides (SITTIG (4th, 2002), HSFS (1999)).

9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Although there is a description of influence on the cholinesterase level as a result of feeding oral administration test of this product to a rat and a dog (HSDB(2003)), toxic impact is unknown, and its data is insufficient, and so it cannot be classify. In addition, the central nervous system effects are suggested as an organophosphorus insecticide (SITTIG (4th, 2002), and HSFS (1999)).
10	Aspiration hazard	Classification not possible	-	-	-	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 96-hour LC50=0.02mg/L of fishes (Salmo trutta) (HSDB, 2004).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity is Category 1, supposed not rapidly degrading (BIOWIN), and bioaccumulative (log Kow=4.85 (PHYSPROP Database, 2005)).